LT15 Trailer

Safety, Operation, Maintenance & Parts Manual

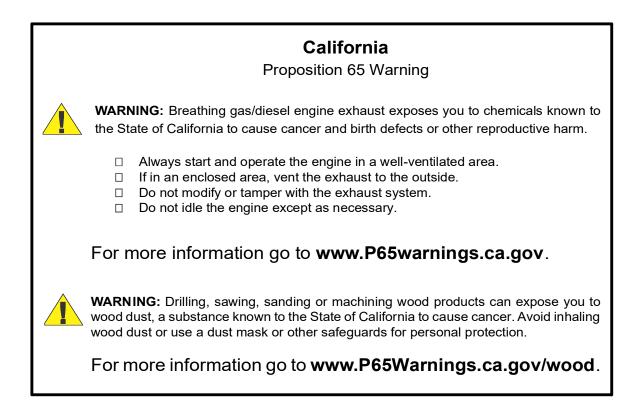
LT15TRG

Rev. A1.00 - A2.01

Safety is our #1 concern! Read and understand all safety information and instructions before operating, setting up or maintaining this machine.

November 2010

Form #1729



Active Patents assigned to Wood-Mizer, LLC

Wood-Mizer, LLC has received patents that protect our inventions which are a result of a dedication to research, innovation, development, and design. Learn more at: <u>woodmizer.com/patents</u>

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Table of Contents

TIRE SAFETY

SECTION 1

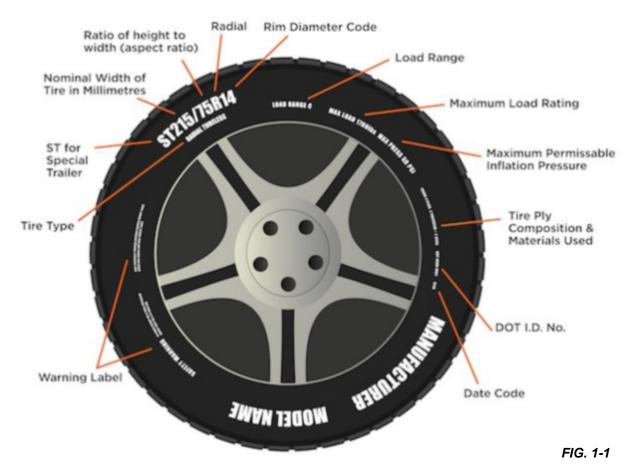
Section-Page

1-1

1.1	Tire labeling1-1	
1.2	Recommended tire inflation pressure1-2	
1.3	Glossary1-5	
1.4	Tire care, maintenance, and safety practices1-7	
1.5	Vehicle load limits1-8	
SECTION	2 TRAILER INSTALLATION	2-1
2.1	Pre-Assembled Sawmill	
2.2	Unassembled Sawmill	
2.3	Up/Down & Feed Handle Relocation2-4	
2.4	Final Installation2-11	
SECTION	3 TRAILER OPERATION	3-1
3.1	Preparing The Sawmill For Travel	
3.2	Preparing The Sawmill For Operation	
3.3	Loading A Log	
SECTION	4 MAINTENANCE	4-1
SECTION	5 REPLACEMENT PARTS	5-1
5.1	Trailer (Complete)	
5.2	Front Trailer Parts	
5.3	Rear Trailer Parts	
5.4	Outrigger Parts	
5.5	Winch Parts5-6	
5.6	Axle/Fender Parts5-7	
5.7	Saw Head Rest Pin/Bracket Parts5-8	
5.8	Up/Down Parts	
	INDEX	I

SECTION 1 TIRE SAFETY

1.1 Tire labeling



Tire markings

TIRE CLASS AND SIZE: (Example: ST215/75R14)

- ST stands for Special Trailer tire. ST trailer tires are built to tow heavy loads, withstand excessive heat, and reduce sway.
- **215** is tire width in millimeters;
- 75 is the aspect ratio, or ratio of height to width;
- **R** is type of construction (radial, in the example)
- **14** is rim diameter in inches.

TIRE TYPE Below the tire size is either 'radial' or 'bias.' Radial tires (or 'radial-ply tires') are constructed with polyester and/or nylon plies that run across the tire perpendicularly, and sometimes include steel belts that run under the tread. Bias-ply tires Bias-ply cords layer in a criss-cross pattern from sidewall to sidewall, and they are also sometimes reinforced with a steel belt.

LOAD RANGE Load range indicates the type of load a tire is designed to support at a specific inflation pressure. Trailer tires typically have C, D, or E load ranges. A load range 'C' tire, for example, is at its peak load capacity—possibly 1600 pounds—when it's inflated to its maximum pressure of 50 PSI. A load range 'C' tire at 25 PSI might be able to support a load of 990 pounds, while at 40 PSI, that capacity could be 1300 pounds.

MAXIMUM LOAD RATING Load rating or load index indicates the weight a tire can safely carry at its maximum air pressure. In the example, at its maximum air pressure of 50 PSI (cold), a load range 'C' tire might have a load rating of 1760 pounds.

MAXIMUM PRESSURE Maximum pressure (when the tires are cold) needed for the tires to carry the maximum load; measured in PSI.



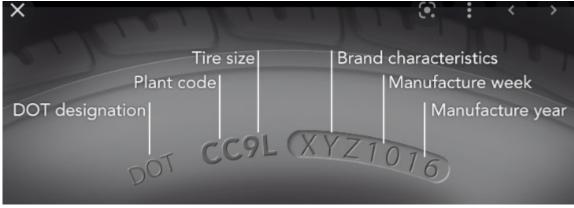
Identifying tires

Tires are required to have a Tire Identification Number (TIN) begin with the letters "DOT," followed by eight to thirteen characters that can be used to identify the manufacturing location, tire size, and manufacturer's specifications, along with the week and year the tire was manufactured. DOT Tire Identification Numbers are commonly but erroneously referred to as the tire's serial number, but it actually identifies production *batches*, not individual items.

Regulations also require the entire DOT Tire Identification Number to be branded on one sidewall, while only the letters "DOT" and the first digits of the Tire Identification Number must be branded onto the opposite sidewall . Therefore it is possible to see a Tire Identification Number that appears incomplete, yet simply requires looking at the tire's other sidewall to find the complete Tire Identification Number.

Tire Identification Number

DOT AND DATE CODES Department of Transportation identifier will include 10-12 numbers following 'DOT.' The first six to eight numbers indicate the manufacturer's code, where the tire was manufactured and the tire size.





1.2 Recommended tire inflation pressure

Recommended cold tire inflation pressure

The cold inflation pressure is the contained air pressure of a tire that would occur at an indexed temperature of 68°F or 20°C. This indexed temperature is based on the ideal ambient operating conditions for the tire.

	Pressure F (20°C)	10 psi	20 psi	30 psi	40 psi	50 psi	60 psi	70 psi	80 psi	90 psi	100 psi
104°F	40°C	11.7 psi	22.4 psi	33.1 psi	43.7 psi	54.4 psi	65.1 psi	75.8 psi	86.5 psi	97.1 psi	107.8 psi
86°F	30°C	10.8 psi	21.2 psi	31.5 psi	41.9 psi	52.2 psi	62.5 psi	72.9 psi	83.2 psi	93.6 psi	103.9 psi
68°F	20°C	10.0 psi	20.0 psi	30.0 psi	40.0 psi	50.0 psi	60.0 psi	70.0 psi	80.0 psi	90.0 psi	100.0 psi
50°F	10°C	9.2 psi	18.8 psi	28.5 psi	38.1 psi	47.8 psi	57.5 psi	67.1 psi	76.8 psi	86.4 psi	96.1 psi
32°F	0°C	8.3 psi	17.6 psi	26.9 psi	36.3 psi	45.6 psi	54.9 psi	64.2 psi	73.5 psi	82.9 psi	92.2 psi
14°F	−10°C	7.5 psi	16.4 psi	25.4 psi	34.4 psi	43.4 psi	52.4 psi	61.3 psi	70.3 psi	79.3 psi	88.3 psi
−4°F	−20°C	6.6 psi	15.3 psi	23.9 psi	32.5 psi	41.2 psi	49.8 psi	58.4 psi	67.1 psi	75.7 psi	84.3 psi
−22°F	−30°C	5.8 psi	14.1 psi	22.4 psi	30.7 psi	39.0 psi	47.3 psi	55.5 psi	63.8 psi	72.1 psi	80.4 psi
−40°F	-40°C	4.9 psi	12.9 psi	20.8 psi	28.8 psi	36.8 psi	44.7 psi	52.7 psi	60.6 psi	68.6 psi	76.5 psi

TABLE 1-1 AMBIENT AIR TEMPERATURE PRESSURE ADJUSTMENT

Listed at 68°	Pressure F (20°C)	69 kPa	138 kPa	207 kPa	276 kPa	345 kPa	414 kPa	483 kPa	551 kPa	620 kPa	689 kPa
104°F	40°C	81 kPa	154 kPa	228 kPa	301 kPa	375 kPa	449 kPa	522 kPa	596 kPa	670 kPa	743 kPa
86°F	30°C	75 kPa	146 kPa	217 kPa	289 kPa	360 kPa	431 kPa	502 kPa	574 kPa	645 kPa	716 kPa
68°F	20°C	69 kPa	138 kPa	207 kPa	276 kPa	345 kPa	414 kPa	483 kPa	551 kPa	620 kPa	689 kPa
50°F	10°C	63 kPa	130 kPa	196 kPa	263 kPa	329 kPa	396 kPa	463 kPa	529 kPa	596 kPa	662 kPa
32°F	0°C	57 kPa	122 kPa	186 kPa	250 kPa	314 kPa	378 kPa	443 kPa	507 kPa	571 kPa	635 kPa
14°F	−10°C	52 kPa	113 kPa	175 kPa	237 kPa	299 kPa	361 kPa	423 kPa	485 kPa	546 kPa	608 kPa
−4°F	–20°C	46 kPa	105 kPa	165 kPa	224 kPa	284 kPa	343 kPa	403 kPa	462 kPa	522 kPa	581 kPa
−22°F	-30°C	40 kPa	97 kPa	154 kPa	211 kPa	269 kPa	326 kPa	383 kPa	440 kPa	497 kPa	554 kPa
-40°F	−40°C	34 kPa	89 kPa	144 kPa	199 kPa	253 kPa	308 kPa	363 kPa	418 kPa	473 kPa	527 kPa

The vehicle tire inflation pressure label and location

The generic bilingual tire pressure label appears as in FIG. 1-3. The label on the vehicle has information specific to the trailer filled in

		ND LOADING INFORMAT S SUR LES PNEUS ET LA	
Le p		nt of cargo should never exceed nents ne doit jamais depasser	
TIRE PNEU	SIZE DIMENSIONS	COLD TIRE PRESSURE PRESSION DES PNEUS A FROID	SEE OWNER'S MANUAL FOR ADDITIONAL
FRONT AVANT			INFORMATION
REAR ARRIERE			VOIR LE MANUEL DE USAGER
SPARE DE SECOURS			POUR PLUS DE RENSEIGNEMENTS

FIG. 1-3



The label is placed near the VIN placard, toward the front left side of the trailer.



FIG. 1-4

Consequences of tire under-inflation

Underinflated tires and overloaded vehicles are a major cause of tire failure. Tire inflation effects a vehicle's

- steering,
- stopping,
- traction, and
- load-carrying capability.

To avoid flat tires and other types of tire failure, you should

- maintain proper tire pressure,
- observe tire and vehicle load limits,
- avoid road hazards, and
- regularly inspect your tires.

Proper inflation

CHECK TIRE PRESSURE

Use a tire pressure gauge, which you can be purchased at most service stations or auto parts stores. Check the pressure when the tires are **COLD**, as the friction from driving affects the pressure. If driven recently, wait at least three hours for the tires to cool down.





COMMON TIRE PRESSURE GAUGES

FIG. 1-5

- 1. Remove the cap from the air valve on the tire, and put it somewhere you won't lose it.
- 2. Press the tire gauge against the open valve stem momentarily.
- 3. Read the air pressure gauge.

- 4. Compare this number with the recommended tire pressure.
- 5. Inflate/release air as needed.
- **6.** Replace the tire's air valve cap.
- 7. Repeat this process for each tire.

INFLATE YOUR TRAILER'S TIRES

- 1. Park close enough to the air compressor so you can reach all tires with the hose.
- 2. If the valve caps are still on, remove them.
- 3. Press the hose nozzle down on the valve stem.

NOTE: You should notice the tire inflating and feel air flowing through the hose. If not, check to ensure the hose is securely placed on the valve stem.

- 4. Remove the hose fitting.
- 5. Check the air pressure as described above.
- 6. Repeat steps 3- 5 as needed until the tire is inflated to the correct psi.
- 7. Repeats steps 2-5 for the vehicle's other tires.
- 8. Once the tires are inflated properly, replace the valve caps.

RELEASE AIR FROM TIRES

Overinflated tires can lead to poor handling, such as skidding and hydroplaning.

1. Briefly press the small dot or bead on the back of the tire pressure gauge into the center of the valve stem on the tire.

NOTE: You should hear the air escaping the tire.

- 2. Use the gauge to check the tire pressure.
- 3. Repeat these steps until you've released enough air to reach the correct psi.

WHEN TO CHECK TIRE PRESSURE

Use Table 1-1 to adjust the recommended cold tire pressure to the ambient temperature. Check tire pressure monthly.

- Most tires may naturally lose air over time.
- Tires can lose air suddenly if you drive over a potholeor other object or if you strike the curb when parking.
- With radial tires, it is usually not possible to determine underinflation by visual inspection.

1.3 Glossary

ALPHA CHARACTER A single alphabetical character from A to Z.

BEAD SEPARATION A breakdown of bond between components in the bead area.

BEAD That part of the tire made of steel wires, wrapped or reinforced by ply cords, that is shaped to fit the rim.

CARCASS PLY A ply that extends to the beads.

CARCASS The tire structure, except tread and sidewall rubber.

CHUNKING The breaking away of pieces of the tread or sidewall.

COLD TIRE PRESSURE The air pressure in a tire at ambient temperature, **not having been driven for the at least 3 hours**.

CORD SEPARATION Cord parting away from adjacent rubber compounds.

CORD The strands that form the plies in the tire.



CRACKING Any parting within the tread, sidewall, or innerliner of the tire extending to cord material.

CURB WEIGHT The weight of a motor vehicle with standard equipment including the maximum capacity of fuel, oil, and coolant, and, if so equipped, air conditioning and additional weight of optional engine.

DEEP TREAD RADIAL A deep tread radial tire is one having a minimum tread depth of 14.3 mm (18/32 inch or 0.5625 inch) or greater.

DOT SYMBOL The letters "DOT" are part of the DOT serial number. This is the manufacturer's certification that the tire or rim meets or exceeds the requirements of FMVSS Nos. 110 and 139.

DOT TIRE IDENTIFICATION NUMBER Number appearing on the sidewall of the tire near the rim required by 49 CFR Part 574.5 which identifies the manufacturer's identification mark, tire size, tire type code and date of manufacture. See Fig. 1-2.

EXTRA LOAD TIRE A tire designed to operate at higher loads and at higher inflation pressures than the corresponding standard tire.

FIELDS Any group of letters and numbers that have significance or meaning.

GAWR The Gross Axle Weight Rating (GAWR) means the value specified by the vehicle manufacturer as the load-carrying capacity of a single axle system, as measured at the tire-ground interfaces.

GROOVE The space between two adjacent tread ribs.

GVWR The Gross Vehicle Weight Rating (GVWR) means the value specified by the manufacturer as the loaded weight of a single vehicle.

INNERLINER SEPARATION The parting of the innerliner from cord material in the carcass.

INNERLINER The layer(s) forming the inside surface of a tubeless tire that contains the inflating medium within the tire.

INTENDED OUTBOARD SIDEWALL (1) The sidewall that contains a whitewall, bears white lettering or bears manufacturer, brand, and/or model name molding that is higher or deeper than the same molding on the other sidewall of the tire; or (2) The outward facing sidewall of an asymmetrical tire having a particular side that must always face outward when mounted on a vehicle.

LIGHT VEHICLE TIRE A new, pneumatic, radial tire intended for use on motor vehicles (other than motorcycles and low speed vehicles) that have a gross vehicle weight rating (GVWR) of 10,000 pounds or less and were manufactured after 1975.

LOAD RATING The maximum load a tire is rated to carry for a given inflation pressure.

MAXIMUM LOAD RATING The load rating at the maximum permissible inflation pressure for that tire.

MAXIMUM INFLATION PRESSURE The maximum cold inflation pressure needed for your tire to support the weight of its *maximum load-carrying capacity*.

MEASURING RIM The rim on which a tire is fitted for physical dimension requirements.

NHTSA/OVSC National Highway Traffic Safety Administration, Office of Vehicle Safety Compliance (Canada).

OPEN SPLICE Any parting at any junction of tread, sidewalls, or innerliner that extends to cord material.

OUTER DIAMETER The overall diameter of an inflated new tire.

OVERALL WIDTH The linear distance between the exteriors of the sidewalls of an inflated tire, including elevations due to marking, decorations, or protective bands or ribs.

PLY A layer of rubber-coated parallel cords.

PLY SEPARATION A parting or rubber compound between adjacent plies.

PNEUMATIC TIRE A mechanical device made of rubber, chemicals, fabric, steel, or other materials, which, when mounted on an automotive wheel, provides the traction and contains the gas or fluid that sustains the load.

RADIAL PLY TIRE A pneumatic tire in which the ply cords that extend to the beads are laid at substantially 90° to the centerline of the tread.

RECOMMENDED INFLATION PRESSURE The cold inflation pressure provided on the Tire Information label and on the VIN tag.

REINFORCED TIRE A tire designed to operate at higher loads and at higher inflation pressures than the corresponding standard tire.

RESPONSIVE TEST A special test initiated through a complaint, field inspection, failed standard test, or COTR discretion. RIM A metal support for a tire or a tire and tube assembly upon which the tire beads are seated.

RIM DIAMETER Nominal diameter of the bead seat.

RIM SIZE DESIGNATION Rim diameter and width.

RIM TYPE DESIGNATION The industry or manufacturer's designation for a rim by style or code. RIM WIDTH Nominal distance between rim flanges.

SECTION WIDTH The linear distance between the exteriors of an inflated tire's sidewalls, excluding elevations due to marking, decoration, or protective bands.

SIDEWALL That portion of a tire between the tread and the bead.

SIDEWALL SEPARATION The parting of the rubber compound from the cord material in the sidewall.

SIZE FACTOR The sum of the section width and the outer diameter of a tire determined on the test rim.

SNOW TIRE A snow tire means a tire that attains a traction index equal to or greater than 110, compared to the ASTM E-1136 Standard Reference Test Tire, when using the snow traction test as described in ASTM F-1805-00, Standard Test Method for Single Wheel Driving Traction in a Straight Line on Snow- and Ice-Covered Surfaces, and which is marked with an Alpine Symbol specified in S5.5(i) of FMVSS No. 139 on at least one sidewall.

TREAD That portion of a tire that comes into contact with the road.

TREAD RIB A tread section running circumferentially around a tire.

TREAD SEPARATION Pulling away of the tread from the tire carcass.

TREADWEAR INDICATORS (TWI) Projections within the principal grooves designed to give a visual indication of the degree of wear of the tread.

UVW The Unloaded Vehicle Weight (UVW) is the weight of a vehicle with maximum capacity of all fluids necessary for vehicle operation, but without cargo, occupants, or accessories that are ordinarily removed from the vehicle when they are not in use.

VEHICLE NORMAL LOAD ON THE TIRE The vehicle normal load on the tire means that load on an individual tire that is determined by distributing to each axle its share of the curb weight, accessory weight, and normal occupant weight and dividing by 2.

1.4 Tire care, maintenance, and safety practices

- 1. Check your cold tire pressure at least once a month (See Proper inflation)
- 2. Visually inspect your tires
 - 1). Check the tread at least once a month for excessive or uneven wear.
 - 2). Measure tread depth in three locations across the tire's tread: (1)outer edge, (2) center, and (3) inside edge.

NOTE: Accurate tread depth measurements are made with a simple tread depth gauge available at any parts store. --Or you can use the quarter (coin) method.

Insert a quarter into a tread groove with the top of Washington's head facing down.

If the top of his head is not visible, your tires have at least 4/32" of tread and are fine for continued use. If you can see above the top of Washington's head, replace the tire.

- **3).** Inspect for over inflation: wear primarily in the center of the tread, with less wear at the tire's edges.
- 4). Inspect for under inflation: wear primarily on both edges of the tire tread, with less wear in the center.
- 5). Inspect for tread wear on one edge of the tire which occurs when the wheels are out of alignment.
- 6). Inspect for erratic tread wear, "cupping," caused by the wheel out of balance, or suspension components need to be replaced.

- 7). Inspect for raised portion of the tread or sidewall which may indicate that one of the belts in the tire carcass has separated from those next to it.
- 3. Have your alignment checked every year.
- 4. Check and correct your tire balance.

1.5 Vehicle load limits

NOTICE Wood-Mizer trailers are not intended to carry any occupants or cargo.

SECTION 1 TRAILER INSTALLATION

IMPORTANT! The trailer option is intended for use with LT15 sawmills Rev. E4.00 (LT15BS bed section Rev. E.00) and newer with three bed sections. LT15 sawmills prior to Rev. E6.08 require modification to the mast to allow repositioning of the up/down system (<u>See Section 1.3</u>).

1.1 Pre-Assembled Sawmill

If you are adding the LT15TRG trailer option to an assembled LT15 sawmill, the assembled sawmill bed can be lifted onto the trailer frame. Be sure to use adequate manpower and lifting equipment to safely lift and stabilize the sawmill during installation.

- 1. Disassemble the feed rope from the rear rope bracket and remove from the feed crank pulley. Remove the rear feed rope bracket from the sawmill. Move the saw head to the rear end of the bed and support with lifting equipment such as a forklift or hoist. Remove the saw head from the bed and set aside.
- 2. Using adequate lifting equipment, lift the sawmill bed off the ground. Remove the legs.

See Figure 1-1.

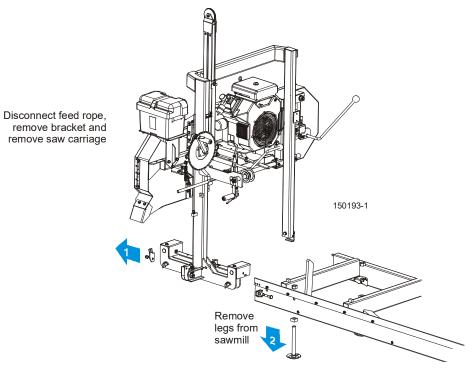


FIG. 1-1

3. Position the trailer next to the sawmill, oriented so the front of the sawmill is at the hitch

end of the trailer. Lower the trailer outriggers and use the jack handle to adjust the outriggers to lift the trailer weight off the wheels and to level the trailer frame.

- 4. Disengage the trailer fender locking straps and lift the fenders from the trailer.
- 5. Lift the trailer winch assembly and pivot the winch down to the ground.
- 6. Pivot the saw head rest bracket down.
- **7.** Position the sawmill onto the trailer frame, aligning the leg mounting holes with the holes in the trailer frame. Secure the sawmill bed to the trailer frame with the provided mounting bolts, bushings, washers and nuts.

See Figure 1-2.

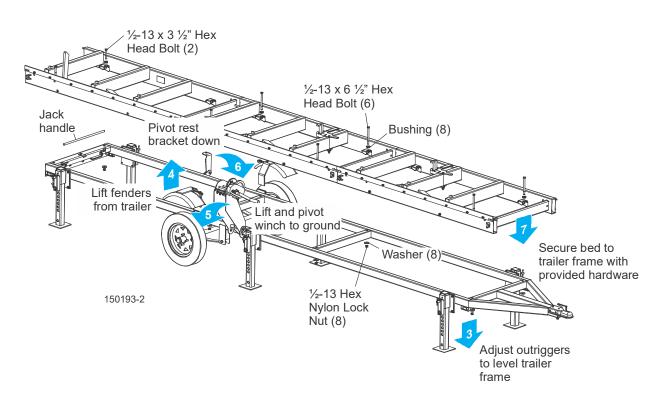


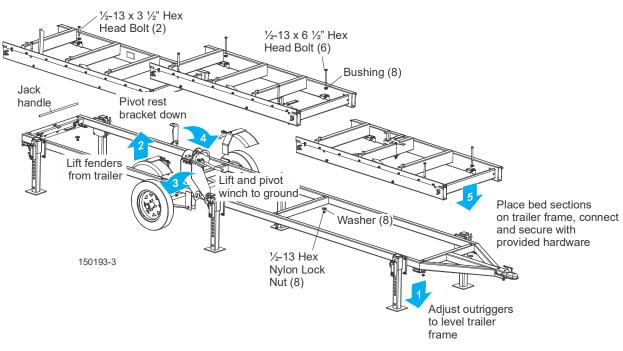
FIG. 1-2

8. Reassemble the saw head to the sawmill and replace the rear feed rope bracket. Leave the feed rope disassembled until trailer installation is complete.

1.2 Unassembled Sawmill

If you are adding the LT15TRG trailer option to a new unassembled LT15 sawmill, the sawmill bed can be assembled to the trailer frame. Be sure to use adequate manpower and lifting equipment to safely lift and stabilize the sawmill during installation.

- **1.** Lower the trailer outriggers and use the jack handle to adjust the outriggers to lift the trailer weight off the wheels and to level the trailer frame.
- 2. Disengage the trailer fender locking straps and lift the fenders from the trailer.
- 3. Lift the trailer winch assembly and pivot the winch down to the ground.
- 4. Pivot the saw head rest bracket down.
- 5. Position the sawmill bed sections onto the trailer frame with the track position on the left side of the trailer as viewed from the hitch end. Connect the bed sections as described in the LT15 manual. Align the leg mounting holes with the holes in the trailer frame and secure the bed to the trailer frame with the provided mounting bolts, bushings, washers and nuts.



See Figure 1-3.

- FIG. 1-3
- **6.** Refer to the LT15 manual to complete sawmill assembly and setup (skip the feed rope installation until trailer installation is complete).

1.3 Up/Down & Feed Handle Relocation

Because the sawmill sits higher when mounted to the optional trailer, parts are included that allow you to relocate the up/down and feed crank handles to a lower position.

- **1.** Move the saw head to rear of the sawmill and lower all the way down. Lower the saw head until it rests on the bed to provide slack in the up/down chain.
- 2. Loosen the up/down chain lower sprocket mounting bolt and the chain tension bolt.
- **3.** Disassemble the up/down chain master links from the mounting bracket and remove the chain from the sawmill.

See Figure 1-4.

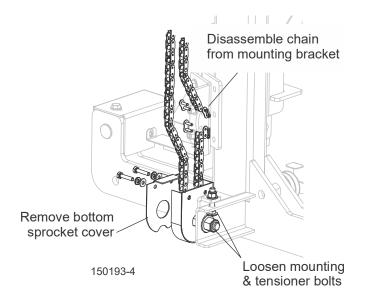
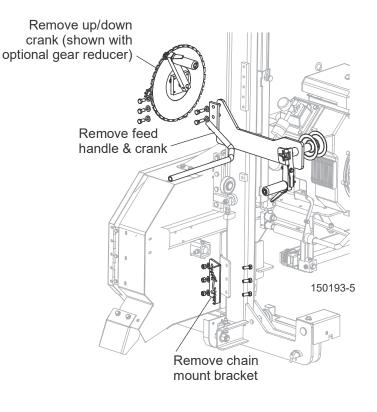


FIG. 1-4

- 4. Disassemble the feed handle/crank assembly from the sawmill mast.
- **5.** Disassemble the up/down crank assembly and chain mounting bracket from the sawmill mast.

See Figure 1-5.





6. LT15 Rev. E4.00 - E6.07 only: Drill two 5/16" diameter holes in the mast vertical tube at the locations specified. Tap the holes with 3/8-16 threads. Note: LT15 Rev. E6.08 include a block with threaded hole welded at the upper location. LT15 Rev. E6.09 and newer include a block with two threaded holes welded at this location.

See Figure 1-6.

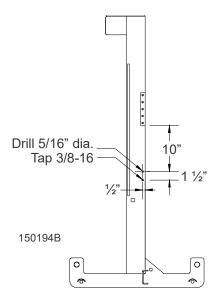


FIG. 1-6

- **7.** Use a C-clamp or vise to press the provided bearings into the up/down mounting bracket housing. Be sure the bearings are oriented with the seals facing outward. To avoid damaging the bearings, do not use a hammer to install.
- **8.** Install the mounting bracket to the sawmill mast positioned two holes lower than the original bracket. Use the existing hardware to secure the top of the bracket to the mast.
- **9.** Install the new chain mount bracket at the bottom of the mast using the existing hardware to secure.

See Figure 1-7.

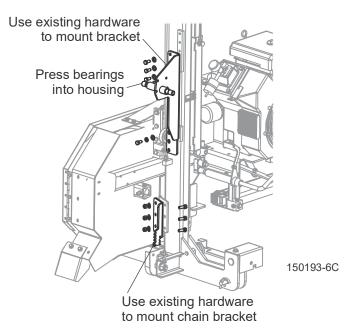
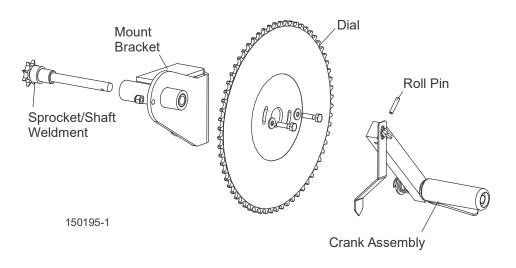


FIG. 1-7

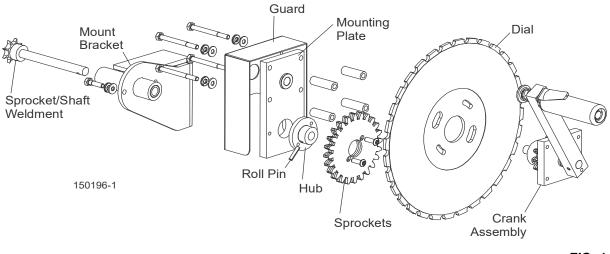
10. Disassemble the up/down crank assembly:

See Figure 1-8. Standard crank assembly: Use a 5/32" punch to remove the roll pin securing the crank assembly to the sprocket/shaft weldment. Remove the crank assembly and sprocket/shaft weldment from the mount bracket. Remove the two bolts, washers and lock nuts to disassemble the dial from the mount bracket.





See Figure 1-9. Gear-reducer crank assembly: Disassemble the four bolts holding the guard, dial and crank assembly to the mounting plate. Use a 5/32" hex wrench to remove the two button head socket screws holding the sprockets to the hub. Use a 5/32" punch to remove the roll pin securing the hub to the sprocket/shaft weldment. Remove the hub and sprocket/shaft weldment from the mount bracket. Remove the two bolts and washers to disassemble the mounting plate from the mount bracket.



11. Assemble the up/down crank to the new mounting bracket:

See Figure 1-10. Standard crank assembly: Secure the dial to the mounting bracket with the existing two $1/4-20 \times 1$ " bolts, washers and lock nuts. Insert the sprocket/shaft weldment through the bearings and secure the crank assembly to the shaft with the roll pin.

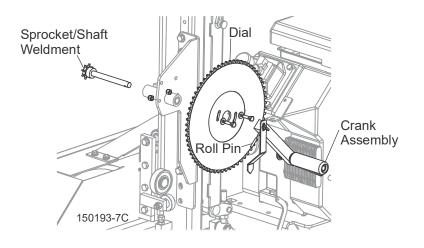
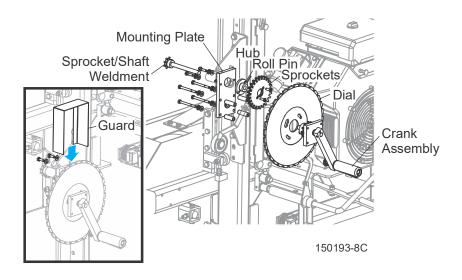


FIG. 1-10

See Figure 1-11. Gear-reducer crank assembly: Secure the mounting plate to the mounting bracket with the two existing flat washers, lock washers and $1/4-20 \times 1$ " bolts. Insert the sprocket/shaft weldment through the bearings and secure the hub to the shaft with the roll pin. Install the sprockets to the hub and secure with the two button head socket screws. Install the dial and crank assembly to the mounting plate and secure with the existing four spacer bushings, flat washers, lock washers and $1/4-20 \times 2 3/4$ " bolts. Install the sprocket guard with the provided two flat washers and $1/4-20 \times 3/4$ " bolts.



12. Assemble the feed handle/crank assembly to the holes at the bottom of the mounting bracket with two provided 3/8" split lock washers and 3/8-16 x 1 1/2" hex head bolts. If you added a threaded hole(s) to the mast at this location, fill the space between the mast and the mounting bracket with spacers such as flat washers.

See Figure 1-12.

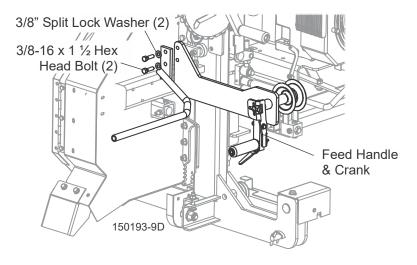


FIG. 1-12

1.4 Final Installation

1. Attach the provided up/down chain to the outer side of the chain mounting bracket with one of the master links provided. Route the chain up and over the top crank sprocket, then down around the bottom sprocket and secure the other end to the bracket with the remaining master link.

See Figure 1-13.

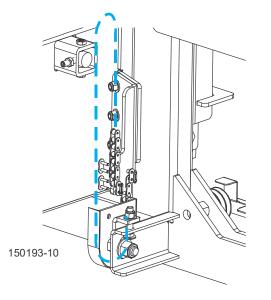


FIG. 1-13

- 2. Adjust the up/down chain tensioner bolt to tighten the chain. Turn the up/down crank handle to lift the saw head off of the bed. Continue adjusting the tensioner bolt until there is 1" of total deflection at the middle of the chain span. Tighten the bottom sprocket mount bolt and replace the sprocket cover.
- **3.** Modify the middle track cover. Cut 3/4" from the bent tab to provide clearance for new feed rope position. Optionally, you can replace the cover (Part No. 016052) with a new modified version.
- 4. Reinstall the feed rope to the feed crank pulley and secure in the rear feed rope bracket.



5. Install the provided saw head rest pin to the blade guide arm housing with the $1/4-20 \times 23/4$ " hex head bolt and lock washer.

See Figure 1-14.

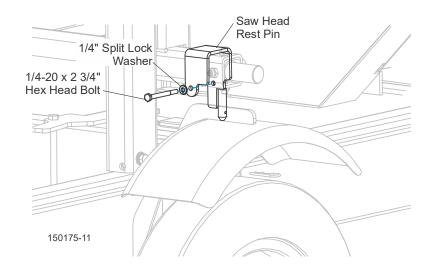


FIG. 1-14

6. Install the two provided red reflectors on each side of the rear of the saw head.

See Figure 1-15.

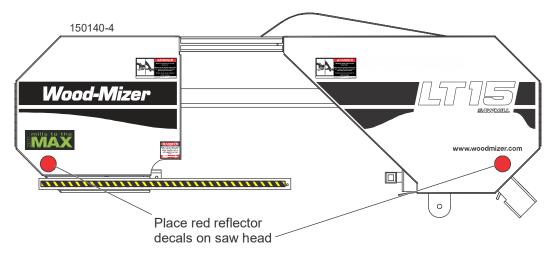


FIG. 1-15

7. Refer to your LT15 manual to perform the sawmill setup procedure to ensure proper alignment prior to sawing.

SECTION 1 TRAILER OPERATION

1.1 Preparing The Sawmill For Travel

IMPORTANT! Your vehicle should be equipped with a Class 2 hitch with a solid 2" ball (not two-piece) and rated for at least 3500 pounds (1588 kg). The hitch should be correctly mounted to the towing vehicle so that it will be able to pull this type of load.

- 1. Move the saw head to the front of the sawmill and raise the rear outriggers.
- **2.** Disconnect the water hose (and fuel hose if equipped) and remove the water tank (and fuel tank if equipped) from the saw head mast.
- **3.** Replace the fenders in the brackets behind each wheel and secure with the locking straps.
- **4.** Move the saw carriage to the travel position and secure the travel lock pins as described in the LT15 operator's manual. Pivot the saw head rest bracket up and lower the saw head until the pin engages the bracket and secure with the retaining pin.



CAUTION! Secure the saw head in the travel position before towing the sawmill. Failure to do so may result in damage to the machine.

- **5.** Place log loading ramps on sawmill bed. Raise winch to upright position and route cable around loading ramps. Tighten cable to secure loading ramps to bed.
- 6. Raise all but the very front outrigger.
- 7. Pull the mill behind the towing vehicle and place the hitch over the ball coupling on your vehicle. Adjust the front outrigger to lower the trailer until the hitch engages the ball. Adjust the coupler if necessary so it is as tight as possible on the ball and the locking lever can still be opened and closed.
- **8.** Flip the locking handle downward, being sure the bracket underneath firmly clamps around the ball. Secure the locking handle with the safety pin.

DANGER! Make sure hitch bracket is securely fastened around ball before towing the sawmill. Ball should be completely engaged by the hitch bracket and securely locked in place. Use the hitch only with the specified ball size. Failure to do so may result in serious personal injury and/or severe machine damage.

9. Cross the safety chains underneath the hitch and hook to the vehicle. The chains should be connected so that there is still slack in the chains when the vehicle is turned sharply in either direction.

DANGER! Make sure your hitch has adequate safety chain hookups. Do not use eyebolts for safety chain hook-up. Safety chains should be hooked to bumper of vehicle so that each chain would pull the trailer equally in the event the hitch became disengaged. Failure to do so may result in serious personal injury and/or severe machine damage.

See Figure 1-1.

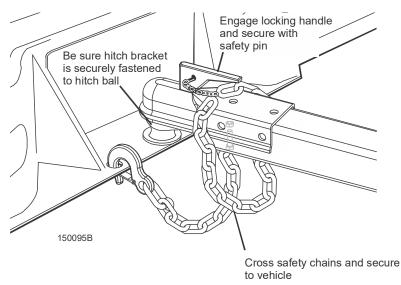


FIG. 1-1

- **10.** Connect the trailer light harness to the towing vehicle light plug.
- **11.** Raise the front outrigger all the way up and place the outrigger jack handle in the storage bracket at the rear of the sawmill.
- **12.** Recheck that all loose items are removed or secured (such as Shingle/Lapsiding Option, cant hooks, etc.).

13. Make sure all connections are secure and trailer lights are working properly.

DANGER! Be sure that the hitch and safety chains are secure before towing the sawmill. Failure to do so may result in serious personal injury and/or severe machine damage.

DANGER! Make sure all light connections have been made and are working properly before towing the sawmill. Failure to do so may result in serious personal injury and/or severe machine damage. Make sure you have complied with all applicable Federal, State and Local motor vehicle safety laws.

14. Check tires for proper inflation.



WARNING! Always check trailer tires for proper inflation before towing sawmill. Failure to do so may lead to tire failure resulting in property damage and/or serious injury or death.



Preparing The Sawmill For Operation

1.2 Preparing The Sawmill For Operation

WARNING! Do not set up the mill on ground with more than a 10 degree incline. If setup on an incline is necessary, put blocks under one side of the mill or dig out areas for outrigger legs to keep mill level. Setting up the mill on an incline could cause it to tip over, resulting in serious personal injury.

WARNING! Chock the trailer wheels to prevent movement before unhitching it from the towing vehicle. Failure to do so may result in serious injury or death.

WARNING! Always make sure the trailer is supporting the sawmill frame when operating a sawmill with adjustable outriggers. Failure to do so may result in serious injury or death. The adjustable outriggers are intended to support the saw frame with assistance from the trailer.

WARNING! The adjustable outriggers supplied with portable sawmills are not intended for setup on concrete or other hard surfaces. Long-term use of the adjustable outriggers on hard surfaces may cause the outriggers to fail, causing the sawmill to drop. This could result in possible serious injury or death.

If setting the sawmill up on concrete or other hard surface, replace the adjustable outrgger legs with stationary legs.

WARNING! Put front outrigger down before moving cutting head from the rest position. Failure to do so may result in serious injury.

- 1. Position the sawmill in an area that is suitable for sawing.
- 2. Chock the trailer wheels to prevent movement while unhitching the trailer.
- **3.** Unhook the safety chains and light harness from the vehicle and unhitch the sawmill. Lower the front outrigger and set on the ground.
- 4. Release the winch cable and remove the log loading ramps from the sawmill.
- **5.** Remove the saw head retaining pin and raise the saw head from the rest bracket. Pivot the rest bracket down.

6. Move the saw carriage to the front of the sawmill and lower the remaining outriggers. Remove the jack handle from the storage position and use to adjust the outriggers to lift weight from the trailer axle and level the sawmill. Use the jack handle to lift the weight from the locking pin. If necessary, rotate the locking pin counterclockwise so that the inner roll pin is free from the outrigger channel notch, then pull the locking pin out to release the outrigger. Lower the outrigger as necessary. Push the locking pin back in and turn clockwise until the inner roll pin is behind the outrigger channel notch to "lock" the outrigger in place.

See Figure 1-2.

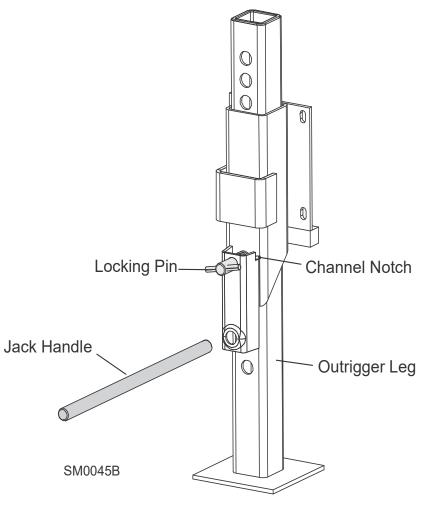


FIG. 1-2. OUTRIGGER ADJUSTMENT.

- 7. Disengage the fender locking straps and lift the fenders from the trailer and set aside.
- 8. Place the log loading ramps in the brackets provided on the side of the sawmill bed.

See Figure 1-3.

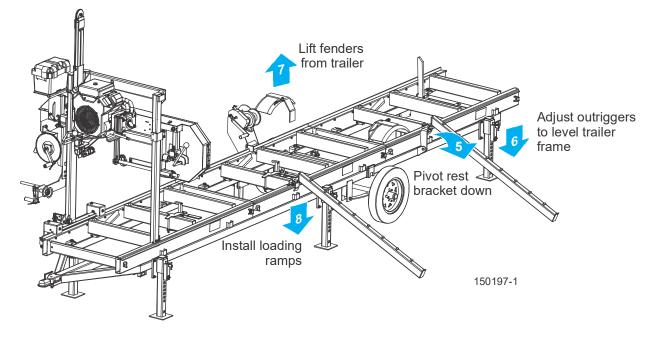


FIG. 1-3

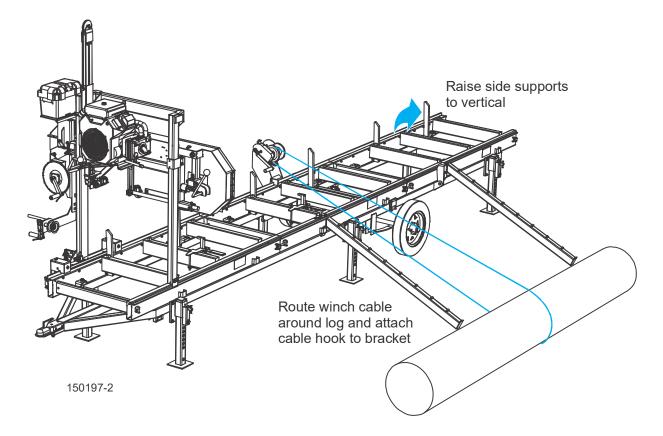
9. Install the water tank (and fuel tank if equipped) to the saw head mast. Connect the water hose (and fuel hose if equipped) as required.

1.3 Loading A Log

DANGER! Keep all persons out of the path of moving equipment and logs when operating sawmill or loading and turning logs. Failure to do so will result in serious injury.

- **1.** Position the log at the ends of the loading ramps, centering the length of the log with the winch.
- **2.** Raise the side supports to vertical to prevent the log from falling off the side of the sawmill.
- **3.** Route the winch cable around the top of the log and back to the winch bracket. Attach the cable hook to the winch bracket.

See Figure 1-4.





4. To operate the winch:

Inspect the winch mechanism and cable for proper operation before each use. Check the cable for damage and replace if necessary. Refer to the manufacturer's manual for lubrication instructions.

The winch supplied is rated to handle 3500 pounds (1588 kg).

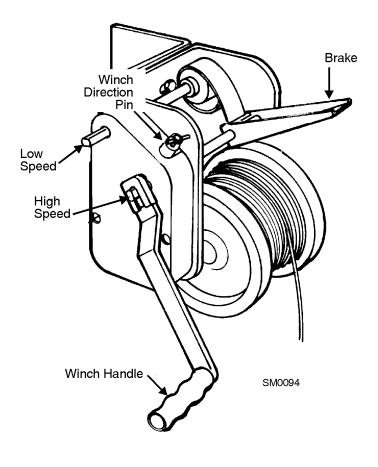
The winch features two-speed operation and a brake. To select the winch speed you want, place the crank handle on the correct winding shaft. The top winding shaft provides a slow, but stronger, winding action. Use this top winding shaft when handling larger logs. The lower winding shaft will provide a faster winding action. Use when handling small to medium size logs.

To install the crank handle to either shaft, press in the spring-loaded locking mechanism on the handle. Slide the handle onto the shaft and release the lock. To remove the crank handle, press in the lock and slide the handle off the shaft.

To operate the brake, make sure the brake strap is positioned over the brake cam. Push the brake handle against the brake strap. Release when the winch stops turning.

WARNING! Maintain a firm grip on the winch handle at all times, and never release handle when ratchet lever is in unlocked position with a load on the winch. Otherwise, handle will spin violently, which could cause personal injury.

See Figure 1-5. To operate the winch, use the winch handle. Turn the handle counterclockwise to tighten the cable. To loosen the cable, raise the winch direction pin, turn it 90° and release it. (The pin rest arms should keep it in the raised position.) Now move the winch handle clockwise to loosen the cable. When finished, turn the pin 90° and release. (The pin should return to its original position.)





- **5.** Once the log is loaded, disconnect the winch cable and wind the cable up. Lift the winch assembly and pivot down to the ground.
- 6. Adjust the side supports to clear the blade for the first few cuts.



SECTION 3 MAINTENANCE

- 1. Grease the trailer axle wheel bearings with lithium grease every 3 months or 1,000 miles (1,609 km), whichever comes first.
- 2. Make sure that the trailer tires are correctly inflated to the pressure shown on the tire.



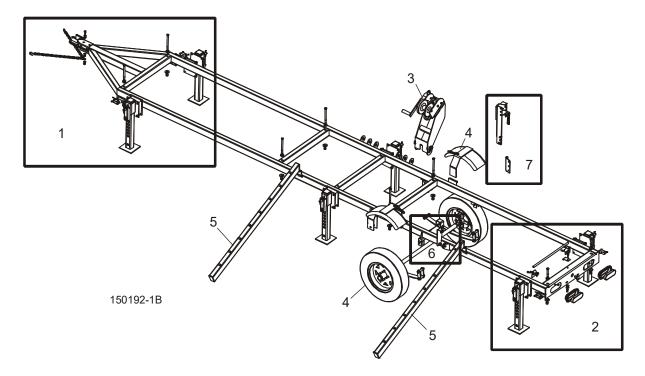
CAUTION! Always check trailer tires for proper inflation before towing sawmill. Failure to do so may result in machine damage.

3. Check the adjustment of the trailer hitch coupler bracket frequently and adjust if necessary. Replace any bent or otherwise damaged parts before using the hitch. Use only parts provided by the hitch manufacturer for this hitch model.



SECTION 4 REPLACEMENT PARTS

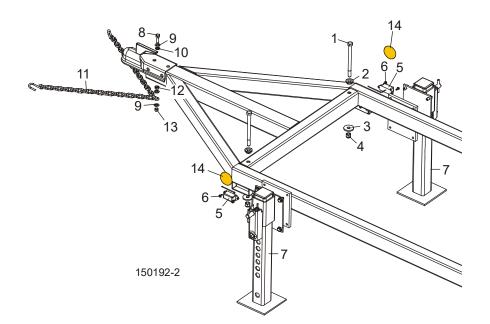
4.1 Trailer (Complete)



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	LT15TRG-A	TRAILER KIT, LT15GO FIELD INSTALL		1
1		Front Trailer Parts	See Section 4.2	
2		Rear Trailer Parts	See Section 4.3	
3		Winch Parts	See Section 4.5	
4		Trailer Axle/Fender Parts	See Section 4.6	
5	062434	Ramp Weldment, LT15TRG Log Loading		2
	025953	Harness, LT15TRG Trailer Light		1
6		Saw Head Rest Pin/Bracket Parts	See Section 4.7	
7		Up/Down Conversion Parts	See Section 4.8	

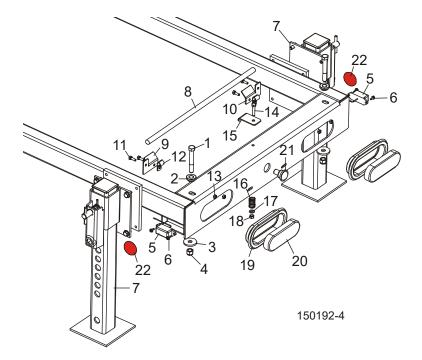


4.2 Front Trailer Parts



REF	PART #	DESCRIPTION	COMMENTS	QTY.
1	F05008-159	BOLT, 1/2-13 X 6 1/2" HEX HEAD GRADE 5		6
2	062461	BUSHING, CLAMP		6
3	014632	WASHER, .52" X 1.69"		6
4	F05010-8	NUT, 1/2-13 HEX NYLON LOCK		6
5	P12906	LAMP, AMBER RUNNING		2
6	F05015-7	SCREW, #10-24 X 1/2" SELF-TAPPING		4
7		OUTRIGGER PARTS ()	See Section 4.4	
8	F05007-78	BOLT, 3/8-16 X 1 1/2" HEX HEAD GRADE 5		1
9	F05011-3	WASHER, 3/8" SAE FLAT		3
10	F05011-36	WASHER, 3/8" EXTERNAL STAR LOCK		1
11	059528	CHAIN, LT15TRG SAFETY		1
12	F05010-19	NUT, 3/8-16 HEX SELF-LOCKING		1
13	F05010-25	NUT, 3/8-16 HEX LOCK		1
14	P07453	DECAL, YELLOW REFLECTOR		4

4.3 Rear Trailer Parts



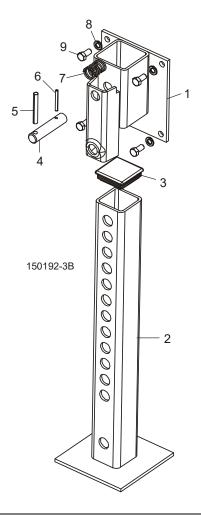
REF	PART #	DESCRIPTION	COMMENTS	QTY.
1	F05008-61	BOLT, 1/2-13 X 3 1/2" HEX HEAD GRADE 5		2
2	062461	BUSHING, CLAMP		2
3	014632	WASHER, .52" X 1.69"		2
4	F05010-8	NUT, 1/2-13 HEX NYLON LOCK		2
5	P12905	LAMP, RED RUNNING		2
6	F05015-7	SCREW, #10-24 X 1/2" SELF-TAPPING		4
7		OUTRIGGER PARTS ()	See Section 4.4	
8	S04827	HANDLE, OUTRIGGER JACK		1
9	062476	BRACKET, JACK HANDLE MOUNT LEFT		1
10	062477	BRACKET, JACK HANDLE MOUNT RIGHT		1
11	F05005-123	BOLT, 1/4-20 X 3/4" HEX HEAD GRADE 5		4
12	P07584	CLAMP, 1/2" EMT COATED		2
13	F05010-21	NUT, 1/4-20 HEX LOCK		4
14	F05006-2	BOLT, 5/16-18 X 1 1/2" HEX HEAD FULL THREAD		1
15	062478	BRACKET, JACK HANDLE LOCK		1
16	046975	SPRING, .72" X .576" X 1.25" COMPRESSION		1
17	F05011-17	WASHER, 5/16" SAE FLAT		1
18	F05010-6	NUT, 5/16-18 HEX LOCK		1
19	006688	GROMMET, 6 1/2" LED LIGHT MOUNTING		2



REF	PART #	DESCRIPTION	COMMENTS	QTY.
20	006391	LIGHT, 8-DIODE LED TAIL		2
21	P09926	LIGHT, 1 1/4" LICENSE PLATE		1
22	P07452	DECAL, RED REFLECTOR		4



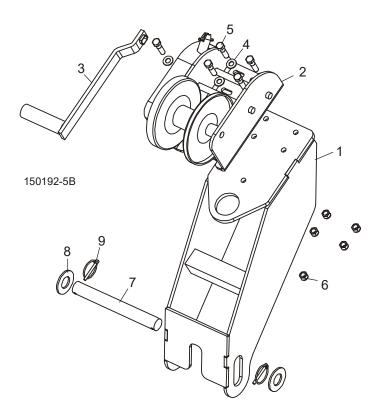
4.4 Outrigger Parts



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	059541	OUTRIGGER ASSEMBLY, LT15TRG		6
1	W12082	Guide Weldment, Painted Outrigger		1
2	059545	Leg Weldment, Painted Outrigger		1
3	P09926	Cap, Outrigger Leg		1
	007736	Pin Assembly, Outrigger Lock		1
4	016147	Pin, 3/4" Outrigger Pull		1
5	F05012-47	Pin, 5/16" x 2 1/2" Roll		1
6	F05012-103	Pin, 3/16" x 1 3/4" Roll		1
7	016145	Spring, .92" x 1.5" x .079" Compression		1
8	F05011-4	Washer, 3/8" Split Lock		4
9	F05007-118	Bolt, 3/8-16 x 3/4" Hex Head Grade 5		4



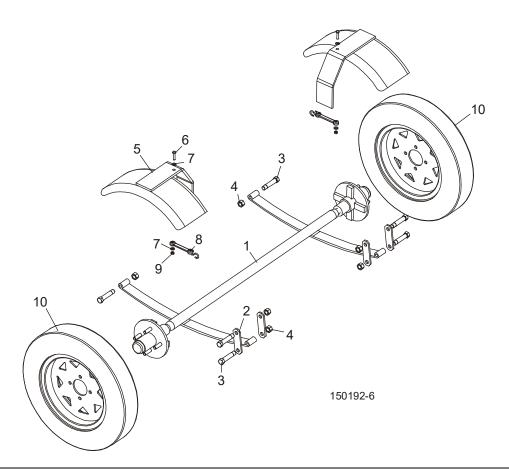
4.5 Winch Parts



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	062485	WINCH ASSEMBLY, LT15TRG		1
1	062453	Bracket Weldment, Winch Mounting		1
2	P12323	Winch, 3500lb DL3500B		1
3	P04487	Handle, Manual Winch		1
4	F05011-3	Washer, 3/8" SAE Flat		5
5	F05007-79	Bolt, 3/8-16 x 1 1/2" Hex Head Grade 5		5
6	F05010-10	Nut, 3/8-16 Hex Nylon Lock		5
7	062488	Pin, 1" x 8 1/4"		1
8	F05011-28	Washer, 1" SAE Flat		2
9	017604	Pin, Lynch 3/16" w/Chain	Replaced F05012-23 3/16" x 1 1/2" Cotter Pin (Rev. A2.01).	2
	P05087	Cable, 7/32" x 50' Winch		1



4.6 Axle/Fender Parts

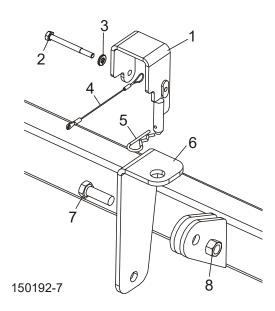


REF	PART #	DESCRIPTION	COMMENTS	QTY.
1	065404	AXLE, 2200LB LEAF SPRING	Replaced 062433 1850lb axle (rev. A2.00).	1
2	M07528	PLATE, PAINTED AXLE SHACKLE LINK		4
3	P04644	BOLT, 9/16-18 X 3' AXLE SHACKLE		6
4	P04643	NUT, 9/16-18 HEX LOCK		6
	025951	FENDER ASSEMBLY, LT15TRG TRAILER		2
5	062463	Fender Weldment, LT15TRG		1
6	F05005-3	Bolt, 1/4-20 x 1 1/4" Hex Head Full Thread		1
7	F05011-11	Washer, 1/4" SAE Flat		2
8	016542	Strap, 6" Rubber		1
9	F05010-21	Nut, 1/4-20 Hex Lock		1
10	065401	TIRE/WHEEL ASSEMBLY, ST145R12 LOAD RANGE D	Replaced 059522 load range C (rev. A2.00).	2



Replacement Parts Saw Head Rest Pin/Bracket Parts

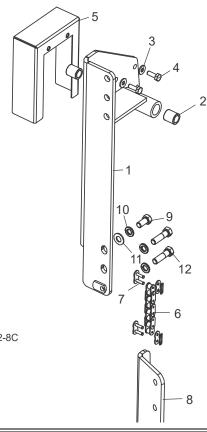
4.7 Saw Head Rest Pin/Bracket Parts



REF	PART #	DESCRIPTION	COMMENTS	QTY.
1	059490	BRACKET WELDMENT, SAW HEAD REST PIN		1
2	F05005-18	BOLT, 1/4-20 X 2 3/4" HEX HEAD		1
3	F05011-14	WASHER, 1/4" SPLIT LOCK		1
4	016030	LANYARD, 3/64" X 6"		1
5	P05059	PIN, 1/8" X 13/16" SAFETY		1
6	062479	PLATE, SAW HEAD REST		1
7	F05008-33	BOLT, 1/2-13 X 1 1/2" HEX HEAD GRADE 5		1
8	F05010-3	NUT, 1/2-13 HEX LOCK		1



4.8 Up/Down Parts



1	501	92-	-80

REF	PART #	DESCRIPTION	COMMENTS	QTY.
	062484	UP/DOWN ASSEMBLY, LT15TRG		1
1	062439	Bracket Weldment, LT15TRG Up/Down Mount		1
2	049331	Bearing, 1/2" x 3/4" Single Seal Needle		2
3	F05011-11	Washer, 1/4" SAE Flat		2
4	F05005-129	Bolt, 1/4-20 x 3/4" Hex Head		2
5	062491	Guard Weldment, Upper Sprocket		1
6	025947	Chain, #40 x 69 1/2" Roller		1
7	P04200	Link, #40 Master		2
8	062438	Plate, LT15TRG Up/Down Chain Mount		1
9	F05007-118	Bolt, 3/8-16 x 3/4" Hex Head Grade 5	Added (rev. A2.00)	1
10	F05011-4	Washer, 3/8" Split Lock	1	3
11	F05011-3	Washer, 3/8" SAE Flat	1	1
12	F05007-78	Bolt, 3/8-16 x 1 1/2" Hex Head		2

INDEX

I

installation feed & up/down handle relocation 2-4 final steps 2-11 pre-assembled sawmill 2-1 unassembled sawmill 2-3

Μ

maintenance tire pressure 4-1 trailer axle wheel bearings 4-1

0

operation 3-1 loading a log 3-7 prepare for operation 3-4 prepare for travel 3-1

P

parts axle/fenders 5-7 front trailer 5-2 outrigger 5-5 rear trailer 5-3 saw head rest pin/bracket 5-8 trailer complete 5-1 up/down 5-9 winch 5-6